



WIP 1633 + Box 529

PATENT

8/B  
P. Webb  
12/11/99

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Date of Signature  
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Carl R. Schwartz, Reg. No. 29,437

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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TECH CENTER 1600/2900

Applicant: James A. Thomson  
Serial No.: 09/106,390  
Filed: June 26, 1998  
Title: PRIMATE EMBRYONIC STEM CELLS  
Art Unit: 1633  
Examiner: Deborah Clark

Assistant Commissioner For Patents  
Washington, D.C. 20231  
Attn: Box Non-Fee Amendment

Dear Sir:

In response to the September 24, 1999 Office Action and in the matter of the above-described case, please enter the following Amendment.

Amendment

In The Specification:

inserted  
as B1

Please replace pages 47-49 of the specification (the sequence listing) with the attached sequence listing.

In The Claims:

Please amend the claims as follows:

Pluripotent

C --1. (Amended) A purified preparation of pluripotent human embryonic stem cells which (i) will proliferate [is capable of proliferation] in an *in vitro* culture for over one year, (ii) maintains a karyotype in which [all] the chromosomes [characteristic of the human species are present] are euploid and not [noticeably] altered through prolonged culture, (iii) maintains the potential to differentiate to derivatives of endoderm, mesoderm, and ectoderm tissues throughout the culture, and (iv) [are] is inhibited from differentiation when  
5  
10 cultured on a fibroblast feeder layer.

C 3. (Amended) A purified preparation of pluripotent human embryonic stem cells wherein the cells are [essentially] negative for the SSEA-1 marker, positive for the SSEA-4 marker, express

B2

B3